ASSESSMENT OF STUDENTS' E-SAFETY
IN RELATION TO GENDER, LOCALE AND DISCIPLINES

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E-Safety: Theoretical Backdrop

E-Safety is defined as a major concern related to a range of activities including online privacy, cyberbullying, exposure to violent content, exposure to content that foments exclusion and hatred, contact with strangers online and coarse language. It is an activity aimed at harming another person by means of verbal or visual messages, using video, audio and software programs. The common forms are harassment, flaming, denigration, impersonation, trickery, exclusion, cyber stalking, cyber threats, the spreading of viruses, attacks against websites and breaking into computers. Cyberbullying is defined as an activity aimed at harming another person by means of verbal or visual messages, using video, audio, and software programs (Livingstone & Gorzig, 2014).Information and communication technologies (ICTs) such as computers, mobile telephones and the internet have long been professed as both an advantage and danger to children and young people. On the one hand, a number of returns are felt to accrue from engaging with digital media-not least enriched and liberal forms of learning; social and cultural empowerment; and augmented choice over the form, time, place and pace of one's actions. But many researchers contend that such profits are tempered by a set of risks of ICT use. These worries are often centered around the notion of the 'child-in-danger' from ICT (Oswell 1998); i.e. the risk of children being exposed unintentionally to unwanted aggressive or sexual content, as well as predatory adults. The intimidating nature of ICT is also reflected in reservations over the 'dangerous child' (Oswell 1998); i.e. children who 'knowingly' use ICTs to harm both themselves and others by vigorously engaging in illicit experiences away from the guideline of adults. People are vulnerable and may expose themselves to danger - knowingly or unknowingly - when using the internet and other digital technologies.

Indeed, some young people may find themselves caught up in activities which are inappropriate or possibly illegal" (Becta 2006). In the UK policy background, these concerns with susceptibility, risk and appropriateness have been expressed in terms of specific 'e-safety' risks and dangers centred around 'four Cs' of online content, contact, commerce and culture . From this viewpoint, children are felt to need guard from a host of online risks, such as cyber-bullies, paedophiles, violent games, illicit downloading of copyrighted and/or inappropriate material, disclosure of personal information and commercial exploitation. Against this theoretical backdrop, the present research attempts to address an important social issue namely Assessment of Students' E-Safety in relation to Gender, Locale and Disciplines.

Methodology of the Study

The objectives of the present study are to explore the various levels of University Learners' E-safety in relation to certain select variables and to recommend remedial measures for Policy Making and Implementation. Thus, the present study is motivated by and tries to answer the research question formulated as given below:

1. What are the various levels of University Learners' E-Safety in relation to certain select variable?
2. What remedial measures can be suggested for Policy Making and Implementation to enhance the levels of University Learners' E-Safety?

A customised scale of Students' E-Safety has been developed by the Investigators to assess the student's E-Maturity. The researchers developed a survey questionnaire to capture data for the study. This tool was aimed to generate data to respond to determine the level of E-Safety through self-developed True-False statements related to Internet Safety. The students were asked to circle the correct answer. This information was collected to show the actual knowledge of the respondents with regard to Internet Safety. Following the development of the research instrument, a group of experts comprising three University Professors specializing in Educational Technology, E-Learning and Computer Science were tasked to carefully scrutinize and assess the instrument for their relevance, content, face and construct validity. The feedback from the experts, recommended that some of the items needed to be removed, whereas others were to be included in the instrument. In the end, 20 items were reduced to 12 items, suggesting a very good sign of data reduction and consistency based on experts' recommendations. Following that, a pilot study involving 60 students provided data for further validation and reliability determination of the instrument. The pilot test was also aimed to see whether the instruments were feasible to obtain the relevant data needed. The results of the pilot study revealed that the instrument is readable; and it yielded a reliability coefficient of 0.87 through the split-half method after the application of Spearman-Brown correlation.

The locale of the present study is the Central University of Tamil Nadu (CUTN). The justification for selecting the Central University of Tamil Nadu is that it has the most diversified Students' Population, with 2133 students represented from the states of Tamil

Nadu, Puducherry, Kerala, Karnataka, Andhra Pradesh, Telangana, West Bengal, Manipur, Bihar, Jharkhand, Meghalaya, Uttarakhand, Madhya Pradesh, Maharashtra, Himachal Pradesh, Jammu and Kashmir, New Delhi, Chhattisgarh, Punjab, Uttar Pradesh, Assam, Haryana, Orissa, Gujrat, Rajasthan, NRI and Foreign. Pluralistic in nature, the gender profile, rural-urban ration and Socio-Economic Backgrounds of the Students make it a representative Higher Education Students' Population, exactly fitting the purpose of the Study.

Analysis and Interpretation of Results

The extent of knowledge on E-Safety among the learners came under scrutiny in the present investigation. The E-Safety scale with 12 items in it has yielded the required data for this investigation. The 12 True-False statements have a maximum score of 12. Scores within the range of 1-4 are considered as Limited Knowledge. Scores within the range of 5-8 are considered as Moderate Knowledge. Scores within the range of 9-12 are considered as Adequate Knowledge. While Table 1 and Figure 1 depict the classification of responses to gain an insight into the level of their E-Safety knowledge, the Table 2 and Figure 2 encapsulate the result of Grouping the Participants in terms of their variables namely gender, types of programme, programme discipline and region of the individuals.It is inferred from table that 6.34 % of the male students have little, 78.57% of them have moderate and 15.07% of them have adequate knowledge about Internet Safety. On the other hand, 69.82% of the female students have little, 26.43% of them have moderate and 3.73% of them have adequate knowledge about Internet Safety.

Table: 1 Distribution of item-wise responses to E-Safety Scores

S.No.	Statements	True	False
1.	Spam is the email equivalent of nuisance phone.	460(76.66)	140(23.33)
2.	Internet activities can be dangerous and illegal.	410(68.33)	190(31.66)
3.	Sexual and emotional abuse can be propagated through internet.	140(23.33)	460(76.66)
4.	Personal photos cannot be easily misused or altered when posted on internet.	20(3.33)	580(96.66)
5.	Sexual predators deceive students by pretending to be student themselves.	120(20.0)	480(80.0)
6.	Spyware can be used to steal private data like passwords, credit card details and bank account details.	85 (14.17)	515(85.83)
7.	When children and adolescents access the internet unsupervised for Lengthy periods of time every day, they can be exposed to online child pornographers and sexual predators.	174(29.00)	426(71.00)

8.	Online terms and condition during registration on a social website are time wasting.	130(21.66)	470(78.33)
9.	Browsing with a computer system via hotspot connection without password is prone to internet access misuse.	132(22.00)	468(78.00)
10.	Content uploaded online cannot be permanently deleted.	95(15.83)	505(84.16)
11.	Online friends are more dependable than face to face friends.	510(85.00)	90(15.00)
12.	The act of attempting to acquire sensitive information such as usernames, passwords and credit card details is termed hacking.	596(99.33)	4(0.66)

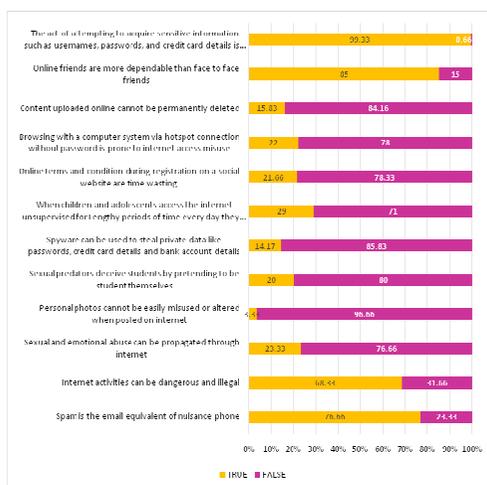Figure in brackets denotes percentage

Figure: 1 Distribution of the E-Safety Scores (item-wise)

This result underscores the need for Counselling on E-Safety especially for Female Students, Undergraduate Students, Language Students and East India Students. It is gratifying to note that the Overall Score for all the Variables range fall between Adequate Knowledge and Moderate Knowledge. Only a small proportion falls in the category of Little Knowledge.

Table: 2 Classification of E-Safety Scores among the Sub-Samples of the Study

Variable	Category	Little Knowledge	Moderate Knowledge	Adequate Knowledge
Gender	Male (N=252)	16(6.34)	198(78.57)	38(15.07)
	Female (N=348)	243(69.82)	92(26.43)	13(3.73)
	Total (N=600)	259(43.16)	290(48.33)	51(8.50)
Types of	Under	9(13.63)	19(28.78)	38(57.57)

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Programme	Graduation(N=66)	26(14.44)	46(25.55)	108(60.00)
	Integrated(N=180)	48(16.00)	54(18.00)	198(66.00)
	Post	4(7.40)	11(20.37)	39(72.22)
	Graduation(N=300)	89(14.83)	128(21.33)	383(63.83)
	Research (N=54)			
	Total (N=600)			
Programme-Discipline	Sciences (N=204)	7(3.43)	35(17.15)	162(79.41)
	Education (N=96)	6(6.25)	12(12.50)	78(81.25)
	Social Sciences (N=192)	9(4.68)	41(21.35)	142(73.95)
	Languages (N=108)	10(9.25)	22(20.37)	76(70.37)
	Total (N=600)	32(5.33)	110(18.33)	458(76.33)
Region	South India (N=300)	8(2.66)	36(12.00)	256(85.33)
	North India (N=150)	10(6.66)	22(14.66)	118(78.66)
	West India (N=84)	7(8.33)	19(22.61)	58(69.04)
	East India (N=66)	6(9.09)	17(25.75)	43(65.16)
	Total (N=600)	31(5.16)	94(15.66)	475(79.16)

Figure in brackets denotes percentage
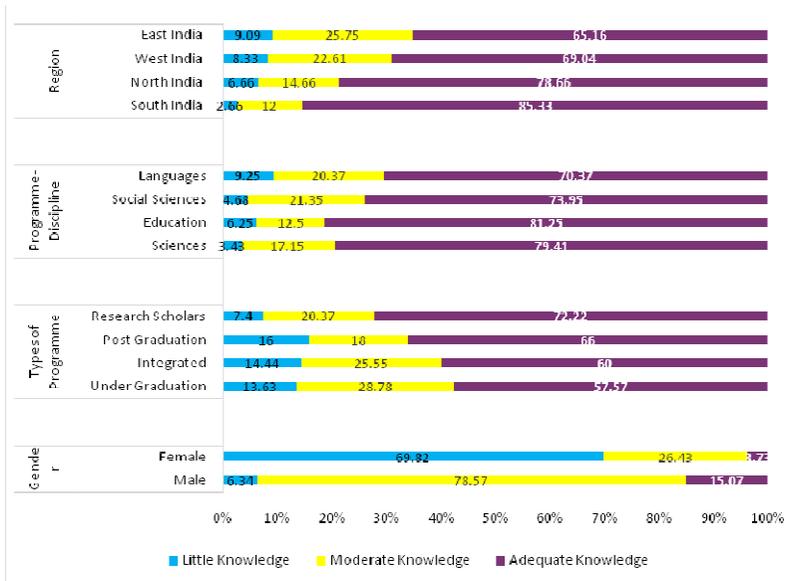
Figure:2 Level of E-Safety among the Sub-Samples of the Study

Discussion and Recommendations

E-Safety has emerged as a major concern and relates to a range of activities and issues including online privacy, cyberbullying, exposure to violent content, exposure to content that foments exclusion and hatred, contact with strangers online, and coarse language. The common forms are harassment, flaming, denigration, impersonation,

outing, trickery, exclusion, cyber stalking, cyber threats, the spreading of viruses, attacks against websites and breaking into computers. The findings reported in this part of the study require substantial attention and great effort from the Government and Institutions to ensure safe Internet Use by the Students. Recommendations are given by the investigator for taking sensible precautions to avoid falling victim of cyberspace dangers and empowering the students to make the right choice online.The result on E-Safety underscores the need for Counselling on E-Safety especially for Female Students, Undergraduate Students, Language Students and East India Students. It is gratifying to note that the Overall Score on E-Safety for all the Variables range fall between Adequate Knowledge and Moderate Knowledge. Only a small proportion falls in the category of Little Knowledge. The findings reported in this part of the study require substantial attention and great effort from the Government and Institutions to ensure safe Internet Use by the Students. The university management should form counselling centres especially for Girl Students to develop critical inquiry skills to make wise decisions online. Awareness programmes on the dangers of Internet pornography, sexual predators, cyber bulling and other Internet threats should be organised periodically. During parents' meetings, enlightenment talk to parents on E-Safety is very essential.

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